

6 SSW Lakewood

26

1445MST

National Weather Service Storm Data and Unusual Weather Phenomena



May 1999 Time Local/ Path Length Path Width Number of Estimated Persons Damage **NEW MEXICO, Southeast Eddy County** 1630MST Hope 22 0 0 Hail(0.75) This supercell storm had an extremely deviant motion, moving almost straight south in western Eddy County. Much larger hail was indicated by radar west of Hope, but no other reports were received. **Eddy County** 1730MST 1900MST **West Portion** Flash Flood 22 The Hope supercell collided with a multicell cluster in the Guadalupe Mountains and caused minor flooding along State Highway 137. **Eddy County** 1830MST 1930MST Carlsbad 23 0 Flash Flood Heavy rains and small hail flooded several streets in Carlsbad. Two streets were barricaded. Lea County 0600MST 0800MST 0 0 Flash Flood **Northeast Portion** 24 Heavy rains caused flooding on roads east of Crossroads. One family 12 miles east of Crossroads reported 7.6 inches of rain. Water was standing up to the bottom of their pickup truck door. Lea County 5 W Jal 1920MST 2100MST 0 0 Flash Flood 24 Flash flooding was reported across State Highway 128. This storm developed ahead of a line of storms and moved slowly eastward until it was hit by a westward moving outflow boundary. Thereafter, it moved little until it was swept up by the line of storm. Lea County 7 N Tatum 1930MST Thunderstorm Wind Outflow winds from a young single-cell storm knocked down a transmission power pole. Lea County 10 SW Tatum Thunderstorm Wind 24 2000MST 0 2KAnother transmission pole was downed as a bow formed in a developing line of storms Lea County 2000MST 2200MST Hobbs 24 Flash Flood Street flooding was reported across much of Hobbs from a wide spot in a line of storms moving to the east. Lea County 2007MST 0 Hail(0.75) **Eunice** 24 Lea County 5 NW Tatum **Funnel Cloud** Seen by many spotters and chasers but according to seasoned chasers no touchdown occurred. This small supercell formed north of a developing line of storms. After the wall cloud dissipated the cell merged with the developing line. Storms that cross the Sacramento Mountains grew and eventually merged into a line by the time they crossed into Texas. **Eddy County**

Hail(1.00)



10 NW Carlsbad

1700MST

National Weather Service Storm Data and Unusual Weather Phenomena



Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Numb Pers Killed	per of sons Injured	Estimated Damage Property Crops	Character of Storm	May 1999
NEW MEXICO, Sout	<u>heast</u>								
Eddy County 6 SSW Lakewood	26	1500MST			0	0		Hail(1.25)	
Eddy County Loco Hills	26	1505MST			0	0		Hail(1.00)	
Eddy County 16 ENE Carlsbad	26	1533MST 1539MST			0	0		Hail(0.75)	
	storm	that was crossing and the final repo	the Pecos Riv ort came from	er in the Seva storm that	ven Rivers a formed sout	rea. The I heast of th			
Eddy County 4 W Lakewood	28	2024MST			0	0		Hail(0.75)	
Eddy County North Portion	28 Sever	2030MST 2200MST ral roads in and are	ound Artesia w	vere flooded.	0	0		Flash Flood	
Eddy County 7 SW Lakewood	28	2033MST			0	0		Hail(1.00)	
Eddy County 5 SW Carlsbad	28	2040MST			0	0		Hail(0.75)	
Eddy County (Cnm)Carlsbad Arpt	28	2051MST			0	0		Thunderstorm V	Vind (50)
Eddy County Central Portion		2100MST 2300MST flooding was wid talled in the high		lsbad. Wate	0 er was report	0 ted 1-2 fee	t deep in some parts	Flash Flood of the city. On State	Highway 137, 7-8
Lea County South Portion	28 29 Sever	2245MST 0030MST ral Roads around J	al were floode	d.	0	0		Flash Flood	
		aused widespread						antains. Eventually an est Texas in the early	
Eddy County 15 NW Carlsbad	29 Brief	1642MST 1644MST dust whirl tornado	0.4 o reported by v	70 vacationing N	0 NWS Chaser	0		Tornado (F0)	
Eddy County Lakewood	29	1643MST 1650MST Falling ahead of to		3	0	0		Hail(0.75)	
Eddy County	20	1700MST	F					Hei(1 00)	

Hail(1.00)





Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Numbe Perse Killed	er of ons Injured	Estimated Damage Property Crops	Character of Storm	May 1999
NEW MEXICO, Sou	theast								
Eddy County 5 NW Carlsbad	29	1715MST			0	0		Hail(1.25)	
Eddy County Carlsbad	29	1735MST			0	0		Hail(0.75)	
Carisma	This s						oved to the souther	ast into Eddy County.	Strong mid -leve
TEXAS, West									
Ector County 7 NW Goldsmith	01	1446CST 1450CST	0.7	100	0	0		Tornado (F0)	
	funnel		ecame rain-wra	pped within	n about 2 mi	nutes, and	was estimated to l	cell line. The tornado h have lasted about two a	
Martin County 12 W Tarzan	the clu produc the to	uster was in Easte ced a very brief to mado was in heav	ern Andrews Cornado. The stry rain to the so	ounty it wa form had a loutheast of t	s forming in huge slot of he spinup po	to an HP s rain that h int. Video	supercell. Just afte ad wrapped around	Tornado (F0) er began to favor one ce er crossing into Martin d the mesocyclone. The ensation funnel to the gr out one minute	County the storm e spotter who say
Gaines County									
East Portion		1500CST 1600CST heavy rains over to ous night.	the eastern part	of the cour	0 nty caused fl	0 ooding to	occur again along	Flash Flood FM 303 where flooding	had occurred th
Gaines County 12 SE Seminole to 13 SE Seminole	01	1537CST 1547CST	2.5	120	0	0	5K	Tornado (F1)	
15 5D Scimilor	Gaine hook e tornad	eell formed near the s County. After c echo on radar. Ab	crossing into Ga bout 6 miles so ssic funnel shap	aines Count uth of U.S. pe with a re	y the storm, Highway 18 latively thin	although s 0 and 3 mi condensati	mall, developed a s les west of the Davion funnel to the g	hern Andrews County to strong mesocyclone, and wson County line, a torr round. The tornado eve	l showed a classi nado formed. Th
					•			aken off a shed and shi int of tornadogenesis.	ingles taken off
	The st	orm began to wea	aken as it enter	ed into Daw	son County.				

Gaines County Central Portion

01 2000CST 0 0 Flash Flood 2100CST

Already soaked Gaines County got a little more flooding as a line of storms passed through the area after sunset. Minor flooding





Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Numb Pers Killed		Estimated Damage Property Crops	Character of Storm	May 1999
TEXAS, West									
	was re	eported on FM 178	38 south of Se	eminole.					
Gaines County 5 S Seminole	01	2000CST			0	0		Hail(1.00)	
Andrews County 3 W Frankel City	01	2030CST			0	0		Hail(1.00)	
Dawson County Lamesa	01	2125CST			0	0		Hail(0.75)	
	cappi		ne entire dryli	ine suddenly	erupted into	a line of		CDT, the upper level lift w Mexico state line. The	
	aftern		arm front m	oved away f	rom the mo			er much of the region. In any focus for the conv	
Glasscock County 3.5 NW St Lawrence	03	1755CST			0	0		Hail(1.50)	
Glasscock County 3 E Garden City	03 Hail b	1825CST oroke out windows	in vehicles o	n State High	0 way 158	0	5K	Hail(1.50)	
	appro	aching 4000 J/kg. s were occurring,	This convec	ction was an	isolated out	tcropping	in Texas where a fa	cimized. CAPE values irly capped air mass ex me dryline played a part	isted. As these
Pecos County Girvin	09	1529CST			0	0		Hail(1.00)	
Pecos County 11 W Bakersfield	09	1555CST	0.5	120	0	0		Tornado (F0)	
		1557CST	•				. condensation funne	l was 2/3 of the way to	the ground. All
Pecos County									
9 W Bakersfield		1605CST rted by people that ounded by the tens				-	ail cannon (used to b	Hail(2.50) break up large hail stone	es). This person
Pecos County	00	1405COT			Δ	0	2V	Thum.d ***	d
9 W Bakersfield	09 Thun	1605CST derstorm outflow v	winds took the	e roof off a p	orch.	0	3K	Thunderstorm Wi	na
Pecos County East Portion	09	1700CST 1900CST			0	0		Flash Flood	
	Flash		up and down	n I-10 from	near Bakers	field to th	e Pecos River. In s	everal places the eastbo	ound lanes were

Flash flooding reported up and down I-10 from near Bakersfield to the Pecos River. In several places the eastbound lanes were covered with water that was 3-4 inches deep, while the frontage road was covered in some spots with 3-4 feet of water. The FM 2886 exit was badly flooded with mud and other debris needing to be moved after the water receded





Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Numb Pers Killed		Estimated Damage Property Crop	Character of Storm	May 1999
TEXAS, West									
Pecos County 11 SSE Bakersfield	09	1730CST			0	0		Hail(0.75)	
Terrell County 33 N Dryden	09 Same	1900CST location that was	hit by the left	-split storm t	0 wo hours be	0 efore		Hail(2.50)	
Terrell County 38 NNE Dryden	09	1925CST			0	0		Hail(1.00)	
	severe appea	e right turn (about red to have been	ut 90 degrees an HP Supero) and moved cell from abo	to the sou out 430-630	theast for pm while	the remainder of in eastern Pecos	the storm neared the Peco the afternoon and eveni County. The storm then be remained in northern Ter	ng. This storm pecame part of a
Terrell County 33 N Dryden	09	1655CST			0	0		Hail(2.50)	
Pecos County 10 NW Sheffield	09	1717CST			0	0	10K	Hail(2.50)	
Upton County 5 N Rankin	The st	form then was abs	sorbed by a lar	ge supercell	storm movi	ng to the so	outheast.	enforcement vehicle Hail(0.75) ne very well organized or	very strong
Pecos County 3 N Ft Stockton	13 The st	1817CST 1835CST corm intensified v	vith winds esti	mated at 70 r	0 nph north o	0 f Fort Stoc	1K kton. During this	Thunderstorm We time one utility pole was	, ,
Pecos County 2 NW Ft Stockton	13	1846CST			0	0		Hail(1.00)	
Pecos County 2 NW Ft Stockton	13	1846CST			0	0		Thunderstorm W	ind (61)
21W It Stockton	Altho	1846CST 1852CST agh the storm was northern edge of	_				west moved into F	Fort Stockton. The severe	
Pecos County 7 N Bakersfield		1920CST form accelerated one report receive		sionally show	0 ring signs of	0 weak rota	tion, but moving t	Hail(1.00) hrough a very sparsely pop	oulated area with
	line ir assista The st mainly	in the northern are nance from the electorm grew sluggisty north of I-10, b lower to mid 90:	eas and was fa vated terrain in the ship to severe in the weaken late	arther west in nitiated one lo intensity just e in the eveni	n the Davis one storm in north of For ng as surface	Mountain the Davis rt Stockton ce tempera	s in the southern Mountains that m . The storm conti tures cooled. In the	long the West Texas/Easte area. Convergence along oved eastward into wester nued severe for over an he ne vicinity of the storm te kg, LI was -7, and 0-3km	the dryline and on Pecos County. our traveling east imperatures were

130 m2/s2.





Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Numb Pers Killed	er of sons Injured	Estimated Damage Property Crops	May 1999 Character of Storm
TEXAS, West								
Jeff Davis County								
10 NW Ft Davis	21 Repor	1545CST 1600CST ted at McDonald (Observatory		0	0		Hail(1.00)
Brewster County Castolon	21 Repor	1754CST 1805CST ted by a Ranger at	: Big Bend Na	itional Park.	0	0		Hail(1.75)
Presidio County Ruidosa	22	2035CST			0	0	1K	Hail(1.25)
Presidio County Ruidosa	22	2035CST			0	0	2K	Thunderstorm Wind
	severe							nmmelled with half-dollar size hail and n. In nearby Candelaria a hail roar was
Presidio County								
21 WNW Marfa	24	1831CST 1841CST			0	0		Hail(0.75)
Presidio County 21 WNW Marfa	24 Torrer	1900CST 2000CST ntial rains of 2 incl	hes fell in 16 :	minutes at th	0 e Marfa Ae	0 rostat Site		Flash Flood
	This s		orthwestern P					tat Site. The storm turned more to the
Reeves County								
Toyah	24 Hail fi	1930CST rom the northern e	end of a cluste	r of storms.	0 Larger hail	0 fell farthe	r south.	Hail(0.75)
Reeves County 15 SSW Pecos	24 Strong	2002CST g cell on the south	end of a clust	er.	0	0		Hail(1.75)
Reeves County Pecos	24 The w	2013CST eaker (northern er	nd of the clust	er) moved fr	0 om Toyah t	0 o Pecos.		Hail(0.75)
Reeves County 20 S Pecos	24 Outflo	2025CST www.inds generate	d by the bowi	ng of the sou	0 uthern cell ri	0 ipped off p	2K part of the roof from a	Thunderstorm Wind house.
Pecos County 15 NW Ft Stockton	24 Hail u	2100CST p to the size of an	orange fell in	rural areas	0 near U.S. Hi	0 ghway 28	5.	Hail(3.00)
								east into western Reeves County. The Highway 285 in rural parts of Reeves

This cluster of storms formed in the northern portions of the Davis Mountains and moved east into western Reeves County. The southern cell of the cluster moved to the right of the mean flow, to the southeast along U.S. Highway 285 in rural parts of Reeves and Pecos Counties. There were reports of rotating wall clouds and brief funnels, but no reports of tornadoes with this classic supercell.

The supercell weakened as it moved across the northern parts of Fort Stockton and turned to an easterly track. Its associated cluster became attached to a developing line of storms to the north.





Location	Date		th Path ngth Width iles) (Yards)		ber of sons Injured	nated nage Crops	Character of Storm	May 1999
TEXAS, West								
Gaines County 6 NW Seminole	24	2135CST		0	0		Hail(1.75)	
Gaines County 6 NW Seminole	24	2135CST		0	0		Thunderstorm Wi	ind (52)
Midland County 1 S Midland	24	2240CST		0	0		Thunderstorm Wi	ind (52)
Midland County North Portion	24 Water	2245CST covered many roads in the	ne area.	0	0		Flash Flood	

A line of storms that formed in eastern New Mexico and the Texas Transpecos moved into the Permian Basin with gusty outflow winds. A cell formed ahead of the line in Gaines County that produced golf ball size hail. Farther south developments along the leading edge of the line in Midland County caused rains to last longer, eventually flooding many roadway in northern Midland County.

Individual cells initially developed in the western areas and eventually merged into a line that stretched north to south along the Texas/New Mexico state line then south-southwest into Pecos County. After the line formed the intensity of the cells dropped dramatically, with the exception of the storm on the end of the line. This southern-most storm produced the largest hail and the longest sustained rotation on radar of all storms for the evening. This supercell also caused the only reported wind damage.

The upper low was still anchored in the Desert Southwest supplying a southwesterly upper level flow aloft. In the late afternoon, surface temperatures were in the upper 80s with dew points in the mid to upper 50s. Mean low-level CAPE values were near 1600 J/kg with an LI near -6 degrees.

Ector County 2 S Odessa	26	1800CST	0	0		Hail(1.75)
Ector County 3 W Odessa	26	1805CST	0	0		Hail(1.75)
Ector County 5 NW Odessa	26	1815CST	0	0	85M	Hail(2.75)
Ector County 5 N Odessa	26	1825CST	0	0		Hail(1.75)
Ector County 5 ENE Gardendale	26	1902CST	0	0		Hail(1.75)
Midland County 9 NW (Maf) Midland Int	26	1902CST	0	0		Hail(1.75)
Andrews County 21 SE Andrews	26	1910CST	0	0		Hail(1.75)

This convection fired along an outflow boundary moving to the southwest in northern Crane County. The initial cell immediately split with the left-split storm moving north toward Odessa, while the right-split storm moved to the ESE into Upton County where it dissipated.

The left-split storm developed a mesoanticyclone as it neared Odessa. As the heart of the updraft moved northward along West Loop 338, baseball size hail was reported near the West County Road/University Blvd. intersection. The storm continued to the north where golfball size hail chased over 1000 people for cover attending a graduation practice. In downtown Odessa one-inch hail stacked up to ankle deep.





		Time Local/	Path Length	Path Width	Numb Pers		Estin Dar	nated nage		May 1999
Location	Date	Standard	(Miles)	(Yards)	Killed	Injured	Property	Crops	Character of Storm	

TEXAS, West

Loving County

The storm moved over the junction of Ector, Midland, and Andrews Counties where golfball size hail was reported. The storm then began to fade near the Andrews/Martin County line. As a line of non-severe storms approached from the west, this storm quickly dissipated.

This storm was the most costly storm in the region for many years. Insurance agencies set up special claims stations and brought in numerous out-of-town employees to handle the workload.

17 NW Mentone	26	1815CST 1827CST			0	0	Hail(2.50)
Reeves County							
6 NE Orla	26	1815CST			0	0	Hail(2.50)
Loving County							
6 N Mentone	26	1844CST 1846CST	0.4	100	0	0	Tornado (F0)
	Brief	tornado in open cou	intry north of	Mentone.			
Loving County							
4 ENE Mentone	26	1902CST 1918CST			0	0	Hail(3.00)
	Vege	tation stripped along	g State Highw	ay 302.			
Winkler County							
8 SW Wink	26	1930CST 1931CST	0.3	150	0	0	Tornado (F0)
	Brief	tornado that became	e rain-wrappe	d very quick	ly. Brief g	glimpse of large	cone-shaped funnel
Ward County							
Pyote	26	2001CST 2010CST			0	0	Hail(1,25)
Ward County							
Pyote	26	2001CST 2002CST			0	0	Thunderstorm Wind (52)
	Estim	nated by chaser.					
Ward County							
Grandfalls	26	2045CST 2105CST			0	0	Hail(1.75)
Pecos County							
Imperial	26	2110CST			0	0	Hail(0.75)
Pecos County							
7 W Bakersfield	26	2220CST 2221CST	0.3	100	0	0	Tornado (F0)
	Spott	ed by a trucker near	I-10. Radar o	confirmed ci	rculation i	n this vicinity.	
Pecos County							
Sheffield	26	2342CST			0	0	Hail(0.75)

This massive right-moving supercell began its life in southern Eddy County, NM where it formed on the flank of another cell moving to the east. As this storm neared the Pecos River, it turned to the right and headed to the southeast into Texas. The storm intensified greatly after crossing the state line.

This supercell was able to keep its organization for over 6 hours as it moved to the southeast loosely paralleling the Pecos River. It produced up to 3 inch hail and 3 brief tornadoes.

All of the tornado information was based on visual accounts and radar interpretation. No survey of the sites was done





Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)		ber of sons Injured	Estimated Damage Property Crop	May 1999 Character of Storm
TEXAS, West								
Brewster County Alpine	27 Repor	1300CST rted at Sul Ross S	tate University		0	0		Hail(0.88)
Jeff Davis County 10 NW Ft Davis	28	1630CST			0	0		Hail(0.75)
Brewster County 10 NW Alpine	28 Car w	1730CST rindows damaged			0	0	2K	Hail(1.75)
Brewster County 10 NW Alpine	28	1730CST			0	0		Thunderstorm Wind (52)
Brewster County Marathon	28	1815CST			0	0		Hail(0.75)
Brewster County 2 W Marathon	28	1825CST			0	0		Thunderstorm Wind (61)
Brewster County 5 N Marathon	28	1835CST			0	0		Thunderstorm Wind (61)
		multicell cluster of thon the cluster st					ntains and moved	l to the east into the plains. After passing
Upton County 3 N Rankin	28	2110CST			0	0		Hail(1.00)
Reagan County 10 NNW Texon	28	2133CST			0	0		Hail(2.50)
	moved		t into Reagan	County. Th				fted slowly to the west and another cell that nd cell continued northeast across Reagan
Loving County 5 E Mentone	28	2156CST 2215CST			0	0		Hail(0.75)
Loving County South Portion	28 29	2300CST 0030CST			0	0		Flash Flood
	The coabout	ell sat over southe	ern Loving cour fell, but just to	nty producin the north, a	g heavy rai lbout 6 incl	n and hail. nes was rej	Eventually roads ported. A large T	from an MCS to the north in New Mexico. became flooded. Near State Highway 302 'U Electric truck had water up to its doors,
Andrews County Andrews	29	0005CST			0	0		Thunderstorm Wind (52)
Andrews County Florey	29	0012CST			0	0	3K	Thunderstorm Wind
v		100.1						

An MCS that moved into West Texas produced outflow winds on its leading edge. At the Andrews County Park some large trees were downed. A girl scout troop was camping in the park where one tent was hit by a falling tree. Luckily no injuries were reported.





May 1999 Time Local/ Path Length Path Width Number of Estimated Persons Damage TEXAS, West Midland County 17 S Midland 30 1737CST 0 0 Hail(1.75) Multicell storm that formed on a northward moving outflow boundary. **Glasscock County** 10 W Garden City 30 1815CST Thunderstorm Wind (52) The Midland County storm moved east into Glasscock County, collapsed, and sent out 60+ mph winds near the intersection of State Highways 135 and 137. Moderately moist air covered the region on this day with dew points in proximity of the storms in the mid to upper 50s. Temperatures were in the lower 90s. **Glasscock County** 5 SE Garden City 1806CST 1808CST 0.3 70 Tornado (F0) An apparent landspout tornado formed briefly in an updraft of the western-most cell of a multicell cluster. The updraft was on the north side of the cell and there was a boundary in close proximity that may have assisted in the formation of the vortex. **Glasscock County** 13 ESE Garden City 31 1815CST Hail(0.75) The cluster that caused the landspout continued to move northeast and dropped this hail on State Highway 158 **Terrell County** 38 NNE Dryden 31 1815CST Hail(1.75) Hail fell near the intersection of State Highway 349 and Ranch Road 2400. **Terrell County** 34 NE Dryden 31 1853CST 1915CST Hail(1.75) Same storm moved to the southeast to near the Pecos River. Had strong mid-level rotation on doppler radar. Storm then crossed the river out of the region. First in a series of storms to develop near the Pecos/Terrell County line. **Pecos County** Sheffield 31 1905CST Hail(0.75) **Pecos County** 2 S Sheffield 31 1910CST 1918CST 0 Hail(1.00) Second in the series of storms. This cluster moved to the east across the Pecos River into Crockett County. **Terrell County** 15 N Dryden Hail(1.75) Hail fell on State Highway 349. **Terrell County** Hail(1.50) 28 NE Dryden Storm that cross Highway 349 moved northeast to the Terrell Gas Plant. This storm cluster formed in extreme eastern Brewster County and moved to the northeast just south of Sanderson. **Pecos County East Portion** 31 2030CST Flash Flood





Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)		ber of sons Injured		nated nage Crops	Character of Storm	May 1999
TEXAS, West	Bute	Standard	(Miles)	(Tards)	Kined	mared	Troperty	Сторз	Character of Storm	
Terrell County North Portion	31	2030CST 2230CST			0	0			Flash Flood	
Terrell County 38 NNE Dryden	31	2105CST 2130CST			0	0			Hail(1.00)	

Hail covered the ground at this location.

This third storm cluster developed in the same area as the others and caused widespread flooding of low-lying areas. Sheffield Draw became a raging torrent and came within 2 feet of the bridge on Highway 349. This bridge was raised 5 feet in 1997 due to deadly flooding in the past. Numerous water crossings on Highway 349 experienced minor flooding. Radar estimates were in excess of 8 inches along the county line near Highway 349.

The dry line was the primary focus for development on this day. Surface temperatures were generally in the mid 90s with dew points near 60 degrees. LAPS estimated CAPE values were generally 1800-2000 J/kg in both regions of initiation.